

Figure 1

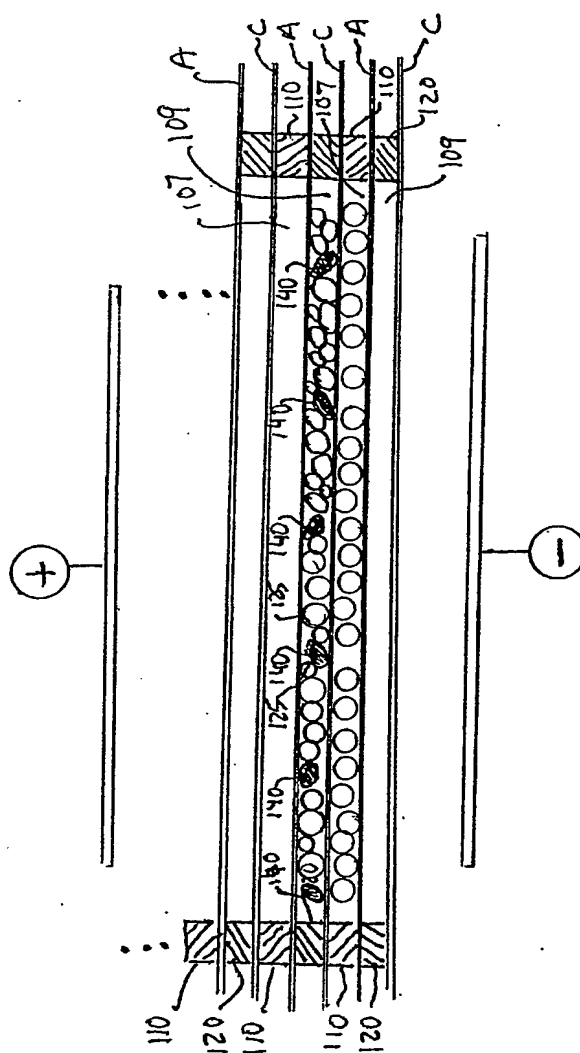


Figure 2

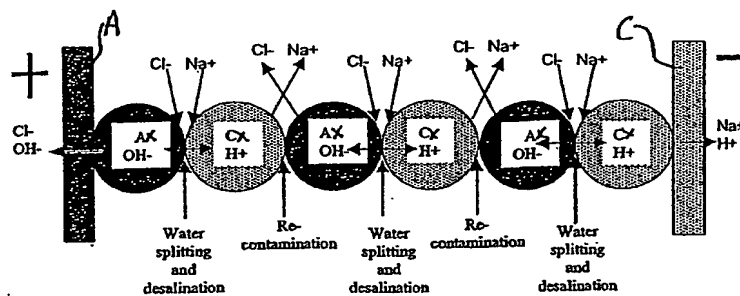
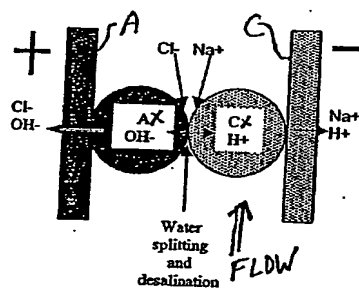
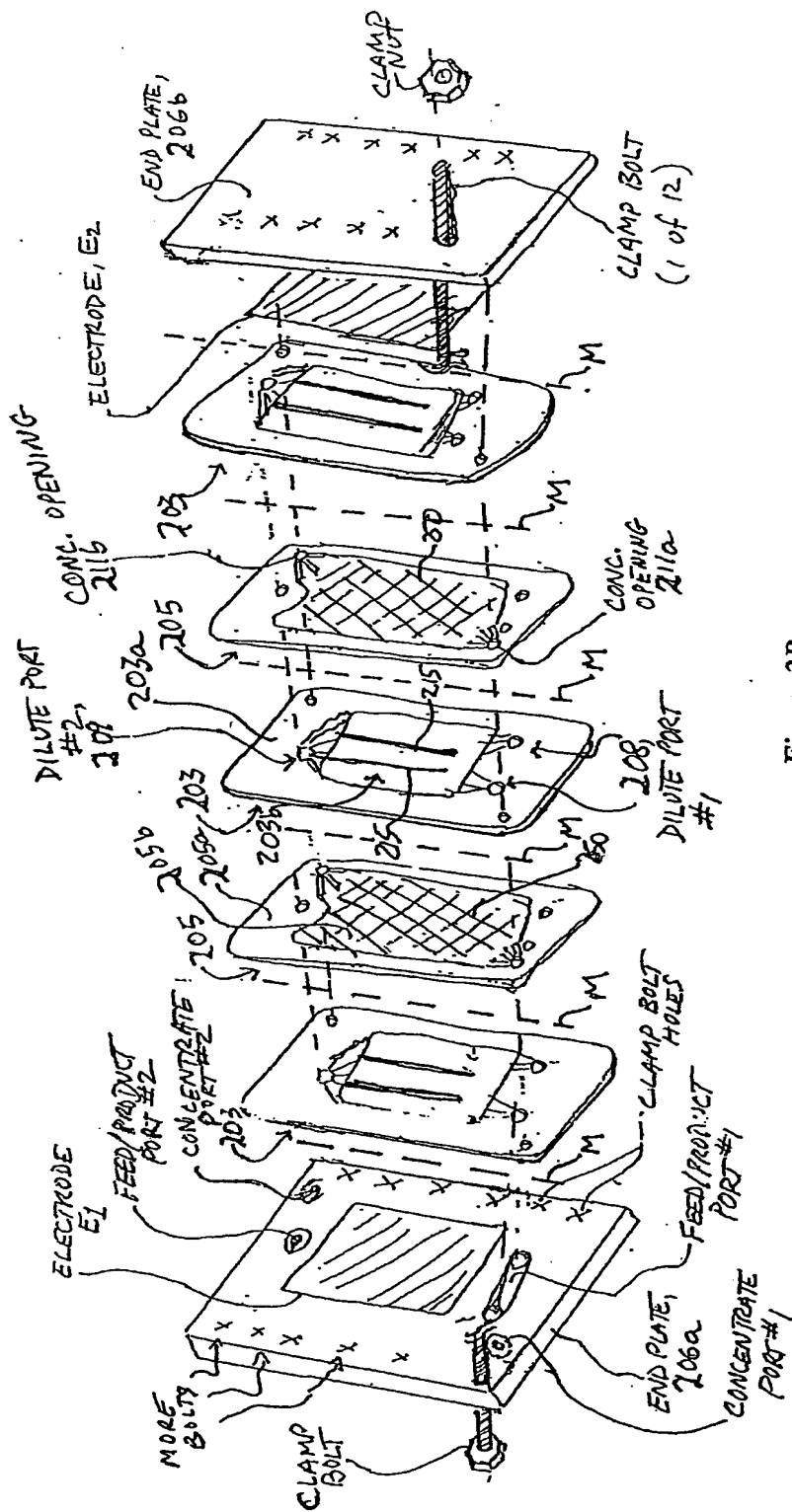


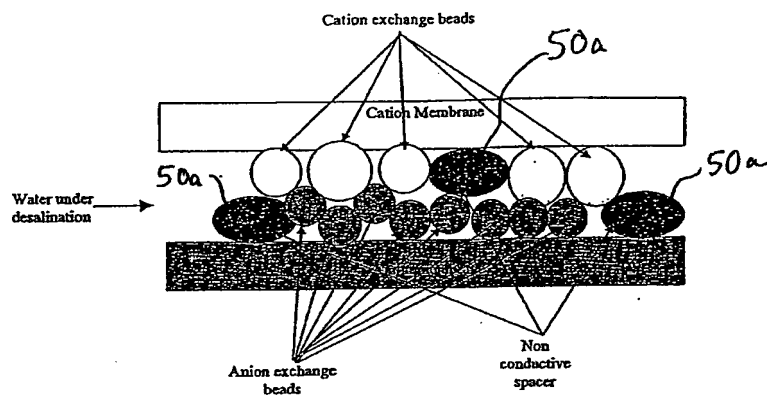
Figure 1A ↑↑ FLOW
Detail of water splitting, desalination and re-contamination in a typical EDI dilute cell of the prior art



Schematic presentation of water splitting and desalination in a bi-layer EDI dilute cell of the present invention

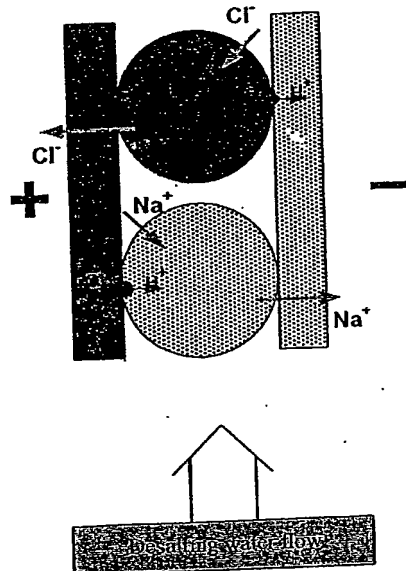
Figure 2A





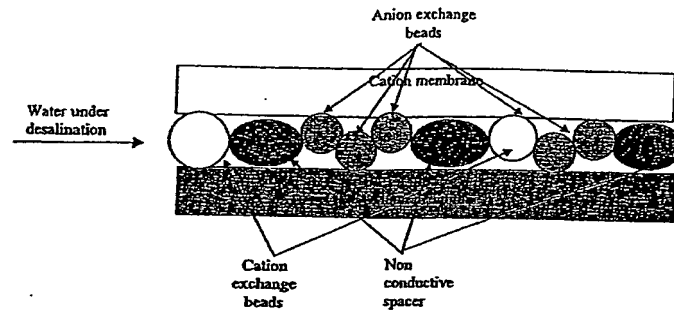
Schematic presentation of water splitting and desalination in a bi-layer EDI dilute cell with a spacer of the present invention

Figure 3



Schematic presentation of water splitting and desalination in a mono-layer EDI dilute cell of the present invention

Figure 4



Schematic presentation of water splitting and desalination in a mono-layer EDI dilute cell dilute cell with a spacer of the present invention

Figure 5

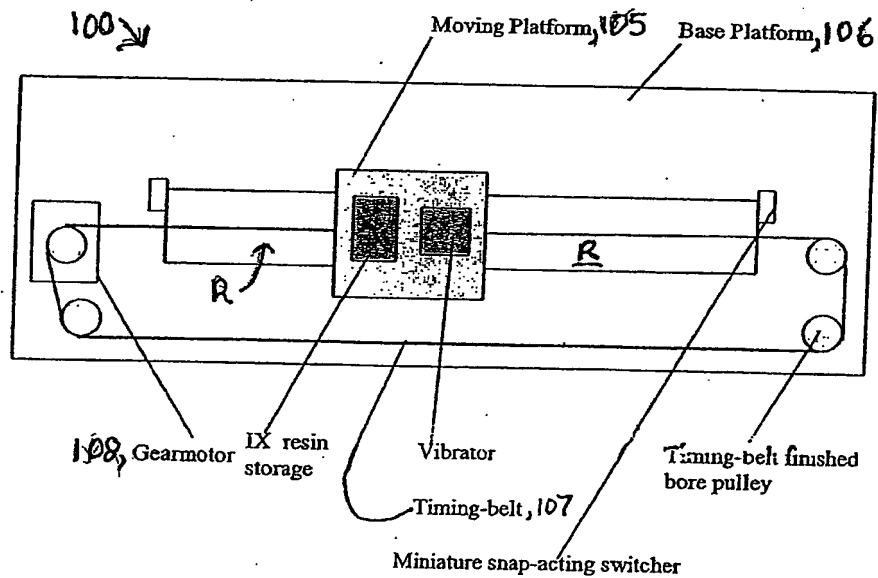


Figure 6

Figure 5A. An enlarged detail in cross-section of a mixed resin three-layer embodiment of the cell of Figure 2.

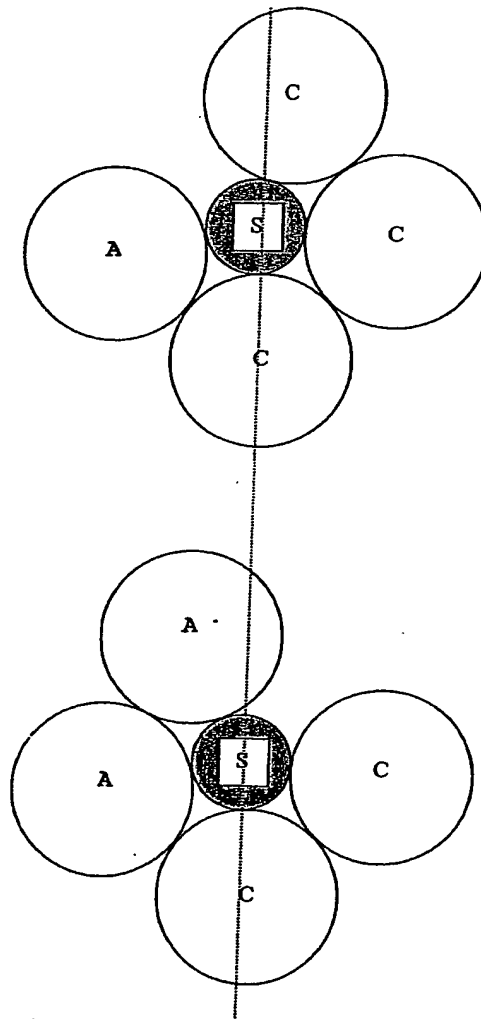


Figure 5B. An enlarged detail in cross section of a mixed resin four-layer embodiment of the cell of Figure 2. Beads fixed on the screen by electrostatic attraction are marked by star.

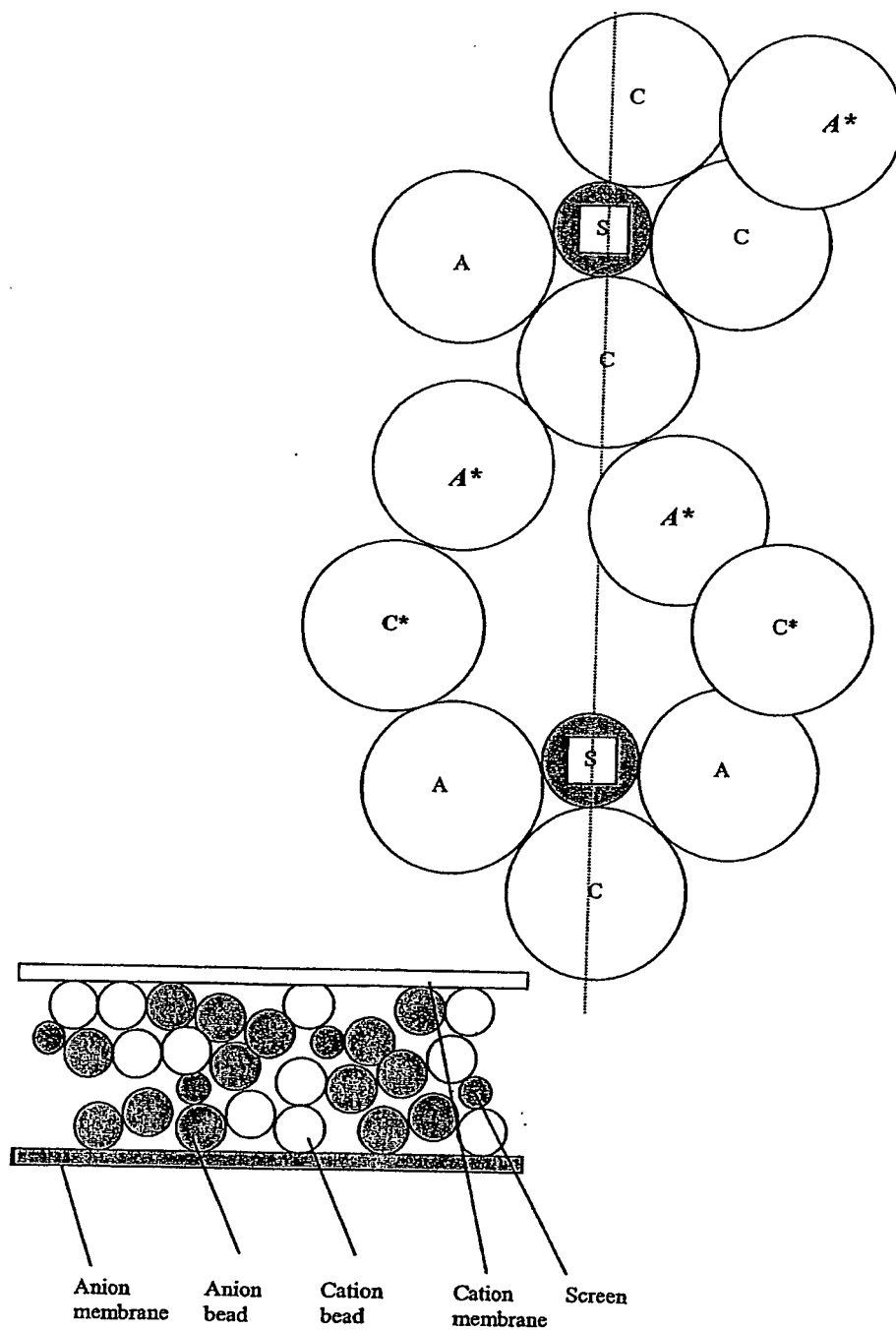


Figure 5C. Multi-layer bead packing with screen between membranes.

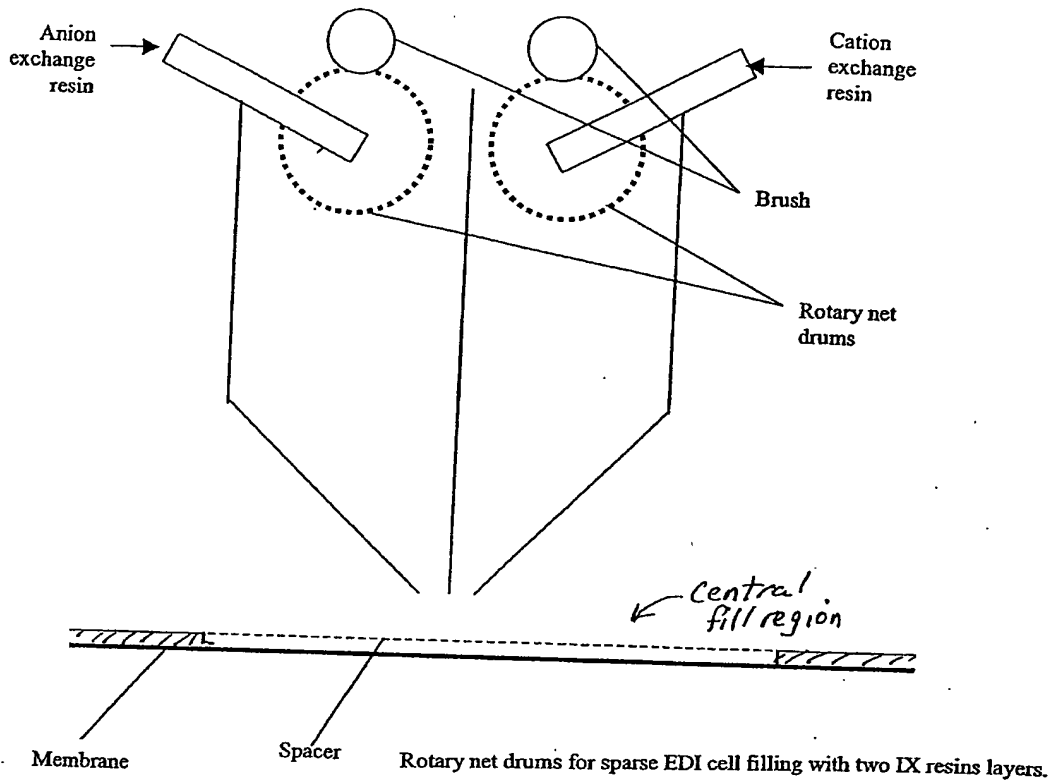


Figure 7

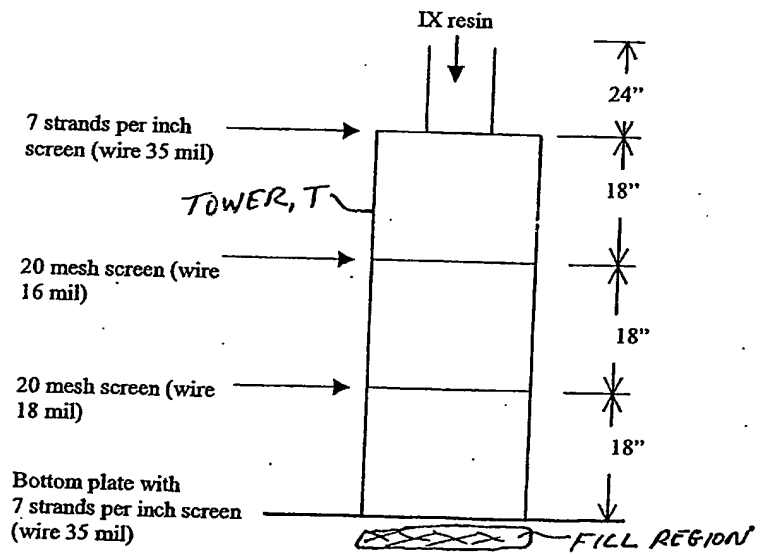


Figure 8